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BASIC METHODS IN
**Molecular
Biology**

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Elsevier

New York • Amsterdam • London

Cover Illustrations:

Representations of 24 base pairs of the standard "B" form of DNA, photographed on an Evans and Sutherland PS300 (Arnott, S., and Hukins, D., *Biochem. Biophys. Res. Comm.* 47:1504, 1972). The molecular surface is displayed with dots (Connolly, M. L., *Science* 221:709, 1983). Color coding is by atom type: nitrogen is blue; carbon is green; oxygen is red; phosphorus is yellow. The back cover shows the same molecule, cross-sectioned approximately halfway through the helix. Cover illustrations were created by and are courtesy of Dr. J. M. Blaney of the Biomedical Products Department of E. I. du Pont de Nemours and Company, Wilmington, Delaware.

Elsevier Science Publishing Co., Inc.
52 Vanderbilt Avenue, New York, New York 10017

Sole distributors outside the U.S.A. and Canada:

Elsevier Science Publishers B.V.
P.O. Box 211, 1000 AE Amsterdam, The Netherlands

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Library of Congress Cataloging in Publication Data

Davis, Leonard G.
Methods in molecular biology.

Includes index.

I. Molecular biology—Methodology. I. Dibner, Mark D.

II. Battey, James F. III. Title.

QH506.D39 1986 574.8'8'028 86-6316

ISBN 0-444-01082-3

Current printing (last digit):

10 9 8 7 6 5 4 3 2

Manufactured in the United States of America

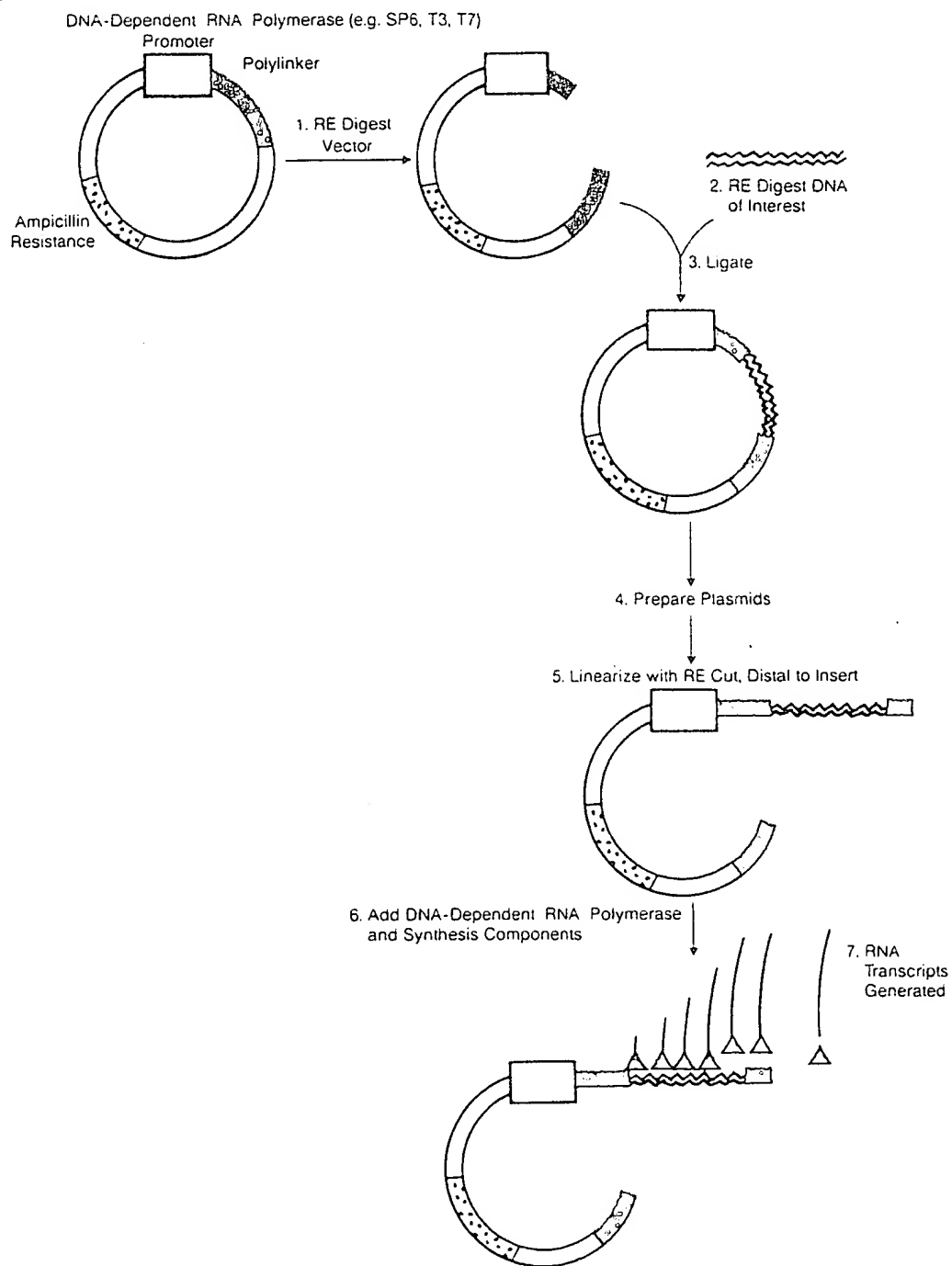
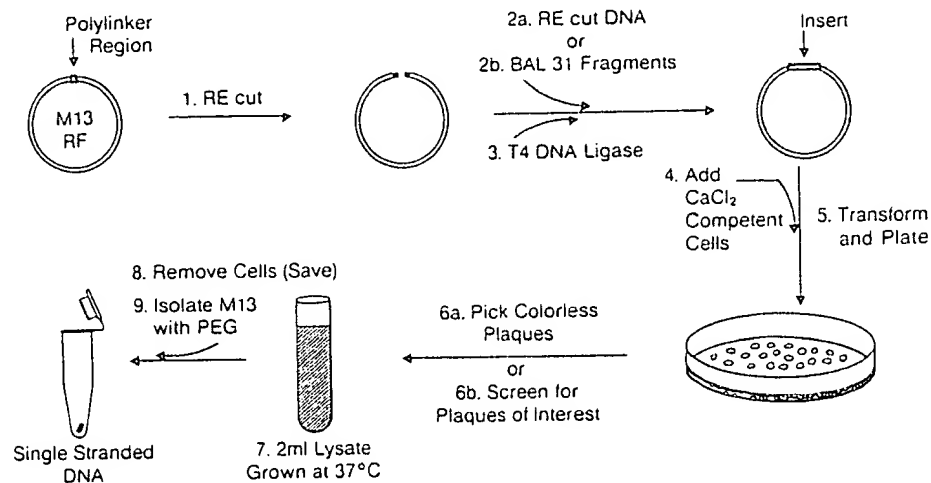


Figure 11.4

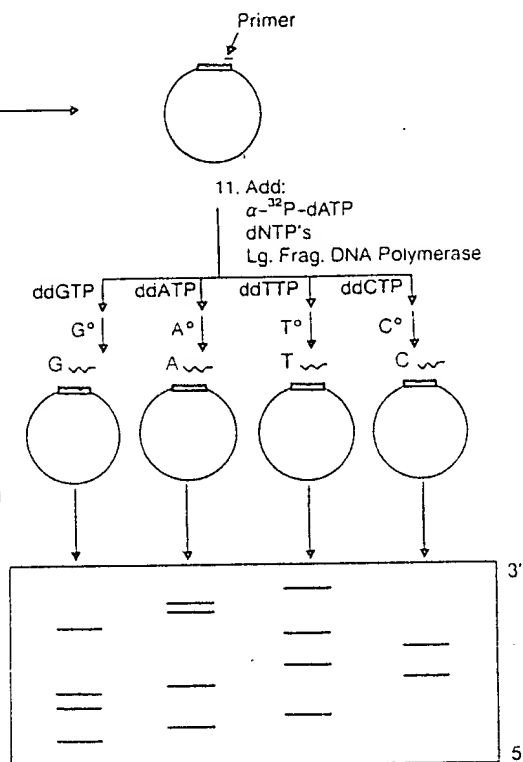
Diagram of RNA transcript formation using plasmids with DNA-dependent RNA polymerase promoters, such as SP6, T3 or T7. The DNA of interest is ligated into the vector at compatible RE-cut ends, and plasmids are prepared in the presence of ampicillin for selection. Following linearization with a RE, RNA is transcribed beginning at the promoter region using a DNA-dependent RNA polymerase. (▲=Polymerase, — =Newly synthesized RNA strands)



12. Make Sequencing Gel

13. Run on Gel

14. Autoradiography



15. Read Sequence From Bottom Up:
5'-GATGGACTCTGAAT-3'